

# ASDC Update CERES Science Team Meeting

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Head, Atmospheric Science Data Center Science Directorate NASA Langley Research Center April 27-29, 2010

## **Topics**



- CERES Production
  - AMI (Automation Modernization through Integration)
- Distribution and Customer Metrics



## **CERES Production**



- New CERES Processing Environment (AMI)
  - Concept was large data stores, large amounts of processing power all connected over fibre channel
    - x86, P6, GPFS primarily using IBM solutions
  - AMI has been difficult to stabilize
    - Rapid hardware growth from initial design has caused issues
    - Pushing the limits of the system architecture
    - Excessive downtimes and degraded service
  - Many resources being utilized to address issues

## **CERES Production**



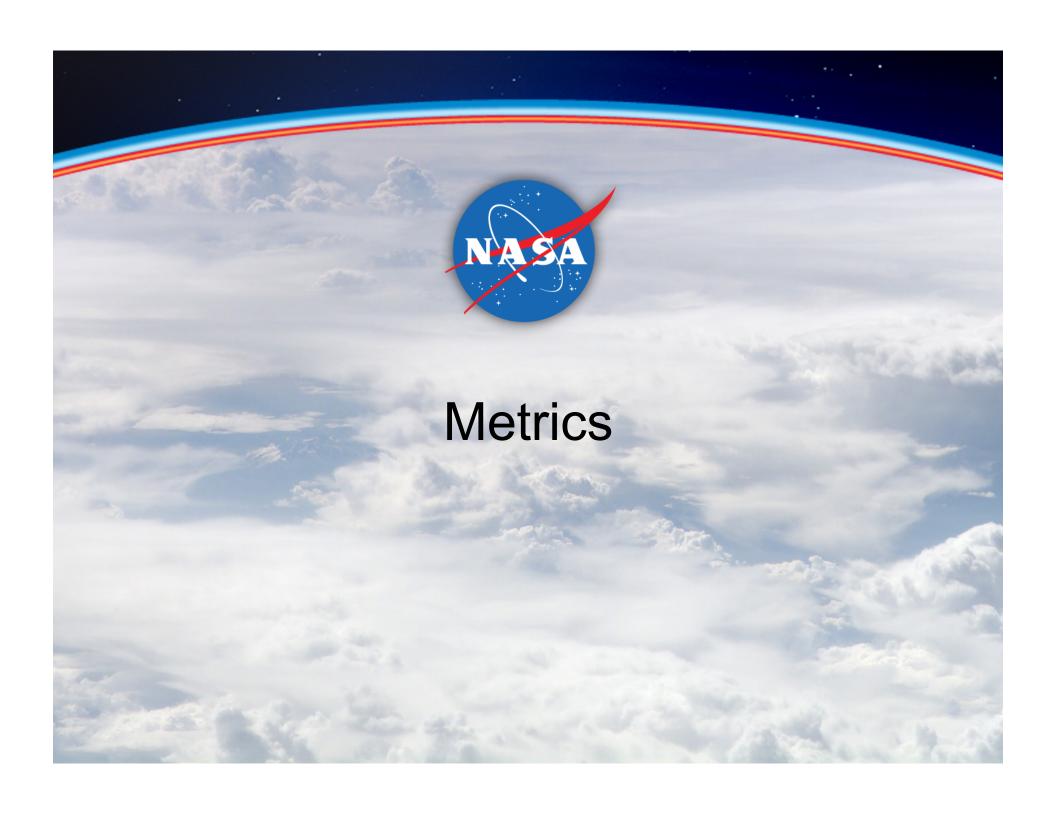
## Re-architecting AMI Imminent

- AMI cannot continue in current architecture
- Requirements of re-architecture include
- Needs to perform
- Needs to fit within available funding
- Needs to be proven and incorporate industry best practices
- Needs to be highly
  - Supportable
  - Maintainable
  - Available

## **CERES Production**

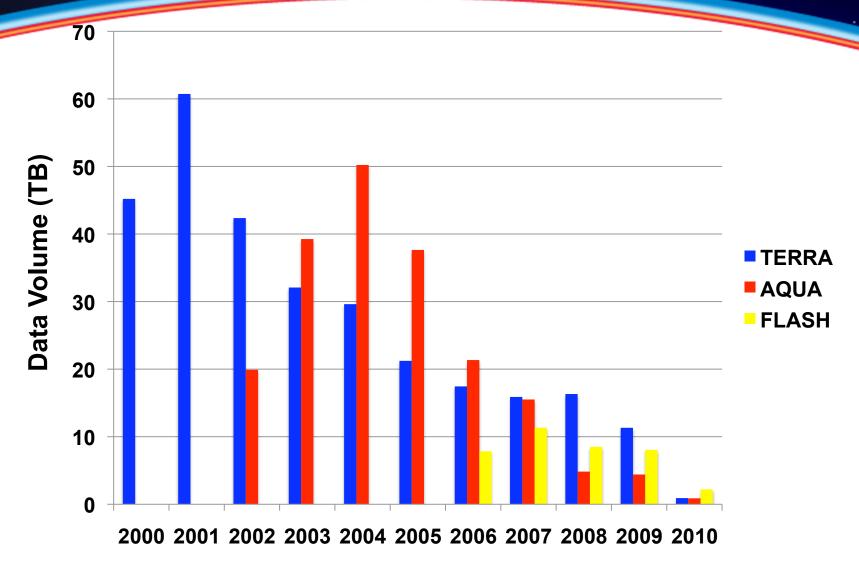


- After re-architecting, AMI should be highly capable
  - Hundreds of processors for SCF and production
  - Hundreds of terrabytes of data on rapidly-accessed spinning disk available to production and users
  - High bandwidth networking for processing
- Until AMI is re-architected
  - AMI is supporting SCF processing
  - Magneto supporting SCF and production processing
  - Warlock supporting production processing



## **CERES and FLASH Data Volume Archived**



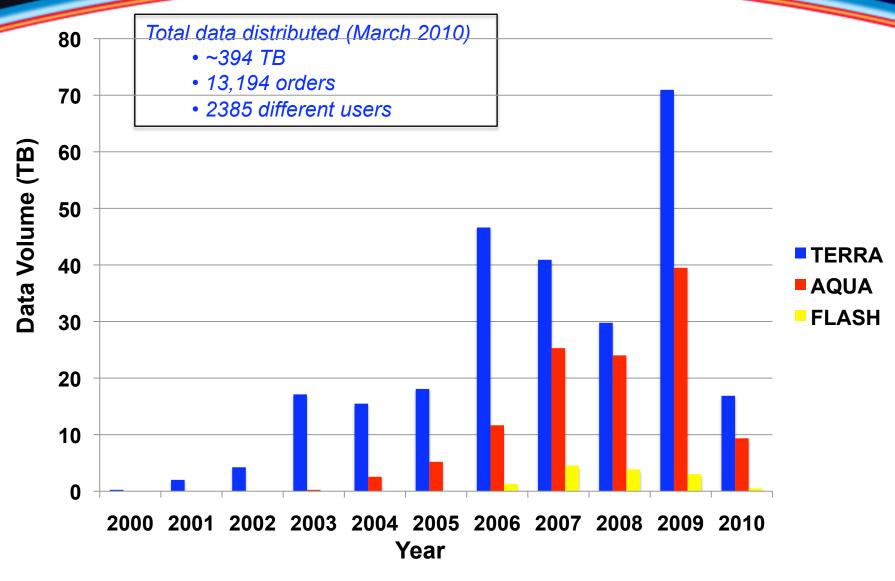


#### **YEAR**

ASDC Status
CERES Science Team Meeting

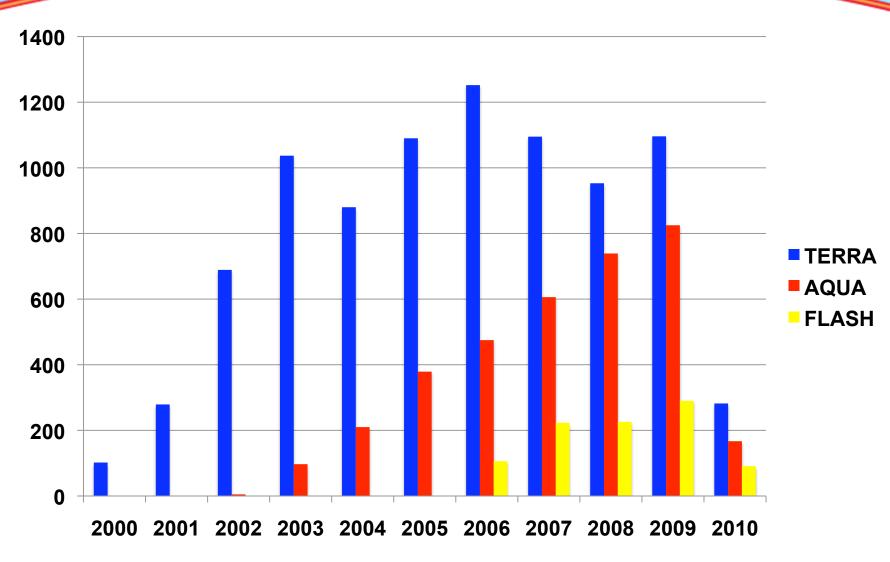
## Data Distribution from ASDC





## **CERES Orders by Year**

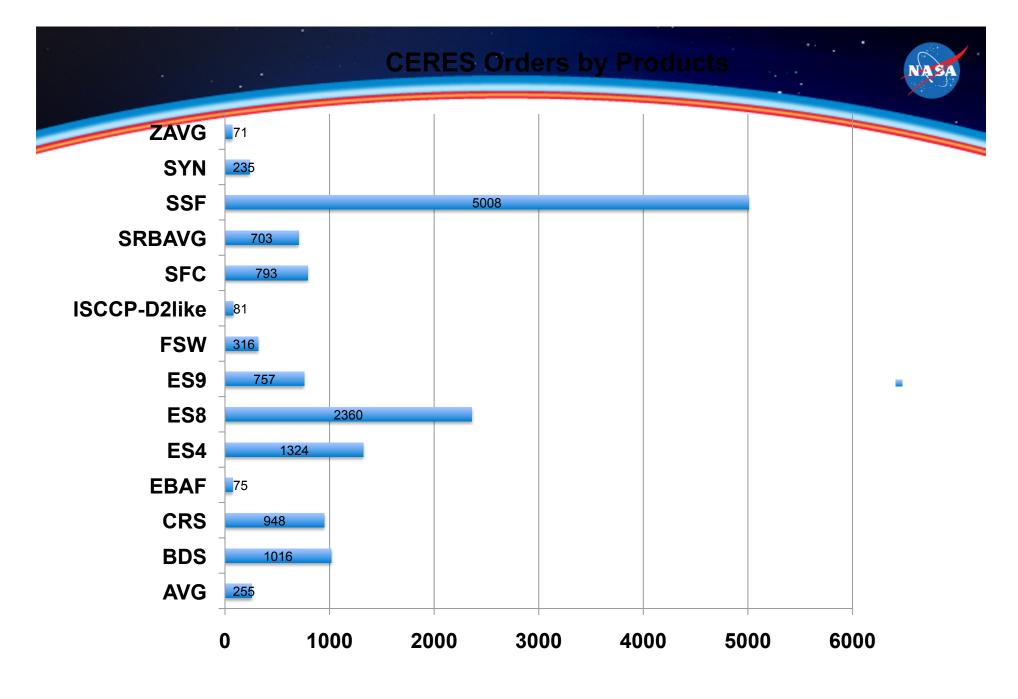




April, 2010

ASDC Status
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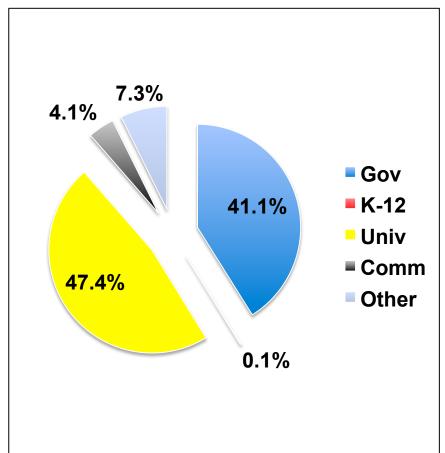
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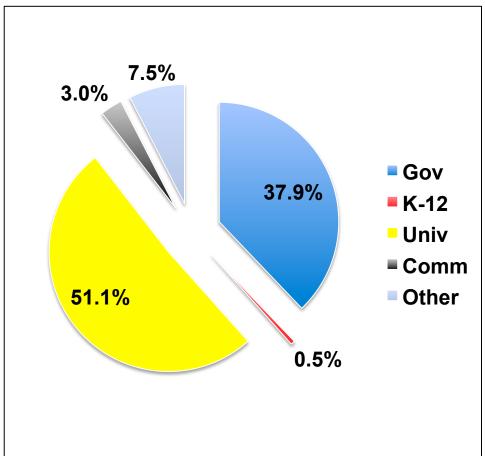
## **CERES Customers by Affiliation**

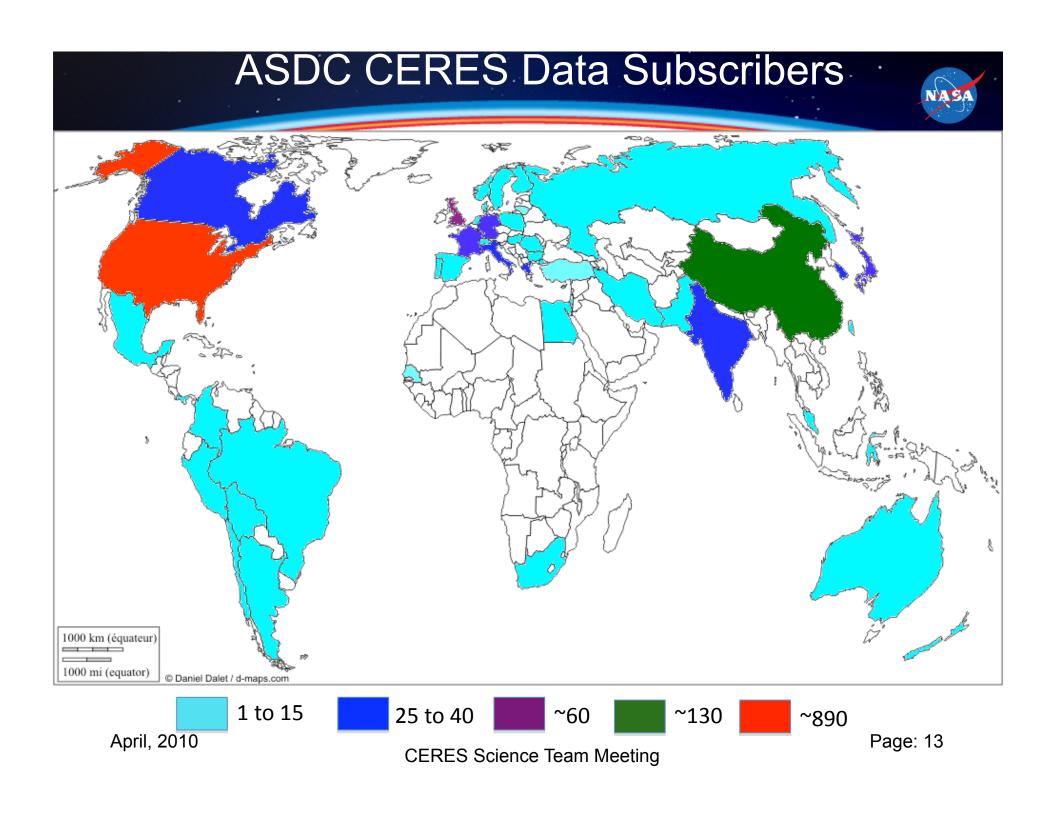


#### **TERRA**



### **AQUA**





## **Contact Information**





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